ABSTRACT

The recording strategy is optimized by determining a pulse response so as to minimize the difference between the reproduced waveform obtained by recording and reproducing the recording pulse signal wherein the record data is superposed with a high-frequency pulse and the waveform calculated by convolution of the record data and pulse responses. In this process, a single recording pulse waveform is recorded on a single track of the optical recording medium for three or more times, and sampled values $z_{p,1}$, $\cdots$, $z_{p+3,1}$, $\cdots$, $\cdots$ $z_{p,2}$, $\cdots$, $z_{p+3,2}$, $\cdots$, $z_{p,3}$, $\cdots$, $z_{p+3,3}$, $\cdots$ of the reproduced waveforms reproduced therefrom are averaged in the order of the sampling to be used as the data for the reproducing waveform. Here, the first suffix for z represents the order of the sampling, whereas the second suffix represents the number of iterated times. The use of the averaged data can remove the influence by the random noise on the reproduced waveform.